

CLAIMS

1 A liquid discharge apparatus comprising discharge control means including:

a liquid chamber for storing liquid;

two pressure generating elements or more provided at the liquid chamber, and serving to press liquid stored within the liquid chamber; and

discharge holes for discharging the liquid which has been pressed by the respective pressure generating elements in the state of droplet from the liquid chamber

to control supply timings and supply times of energies to the respective pressure generating elements to control discharge angle when the droplet is discharged from the discharge hole,

wherein the discharge control means is adapted so that, with energy delivered to one of the respective pressure generating elements being as reference, the discharge control means delivers energy to the other pressure generating element in the state where timing is shifted in a time of the range within 20% of supply time of energy serving as reference with respect to supply timing of energy serving as reference.

2 The liquid discharge apparatus as set forth in claim 1,

wherein the discharge control means delivers the energy to the other pressure generating element at substantially the same timing as that of the

reference energy, or delivers the energy in the state where time is shifted in the range from 7.5% to 20% of supply time of the reference energy with respect to the reference energy.

3 The liquid discharge apparatus as set forth in claim 1,
wherein the discharge means is adapted so that the discharge holes are provided in parallel in substantially line form.

4 A liquid discharge method for a liquid discharge apparatus including:
a liquid chamber for storing liquid;
two pressure generating elements or more provided at the liquid chamber, and serving to press liquid stored within the liquid chamber; and
discharge holes for discharging the liquid which has been pressed by the respective pressure generating elements in the state of droplet from the liquid chamber,

 wherein energy delivered to one of the respective pressure generating elements is caused to be reference, and energy is delivered to the other pressure generating element in a time of the range within 20% of supply time of energy serving as reference with respect to supply timing of energy serving as reference to control discharge angle when the droplet is discharged from the discharge hole.

5 The liquid discharge method as set forth in claim 4,
wherein the energy is delivered to the other pressure generating

element at substantially the same time timing as that of the reference energy, or the energy is delivered thereto in the state where time is shifted within the range from 7.5% to 20% of supply time of the reference energy with respect to the reference energy.

6 The liquid discharge method as set forth in claim 4,
wherein the discharge holes are provided in parallel in substantially
line form.